

Curriculum Vitae

Personal Information

Name	Evgeny Cherkashin (Евгений Александрович Черкашин)	
Sex	Male	
Address	Lermontov str. 281/3-51 Irkutsk, Russia, 664033	
Phone	+7 (914) 870 67 54	
Email	eugeneai@irnok.net	
Date of Birth	19th August 1974	Country: USSR
Nationality	Russian	
Citizenship	Russian Federation	

Work Experience

Sep. 2018 - present	Assitant Professor, Chair of Information systems and Software protection, Irkutsk State Transport University (ISTU) Chernyshevsky str.-15, Irkutsk, 664074, Russia
Apr. 2014 - present	Senior Researcher at lab. "Complex Information Systems", Matrosov Institute of System Dynamics and Control Theory (ISDCT SB RAS), Lermontov str. 134, Irkutsk, Russia, 664033
Sep. 2009 - Apr. 2014	Head of Laboratory "Methods for Artificial Intelligence", ISDCT SB RAS
Jun. 2000 - Sep. 2009	Senior Researcher, ISDCT SB RAS
Sep. 1997 - Jun. 2000	Programmer, ISDCT SB RAS
Sep. 2005 - present	Assitant Professor, Institute of Mathematics, Economics and Informatics, Irkutsk State University (ISU) Gagarina ave. 20, Irkutsk, Russia, 664003
Sep. 2005 - present	Assistant Professor, Institute of Informational Technologies and Data Analysis (former Institute of High Technologies, former Institute of Cybernetics) Irkutsk National Research Technical University (IrNITU) Lermontov str. 83, Irkutsk, Russia, 664074
Sep. 1996 - Sep. 2005	Senior Lecturer, IrNITU

Education and Training

1996 - 1999	PhD - Thesis title: «Programming Complex Quant/2 for Automatic Theorem Proving», ISDCT SB RAS
1991 - 1996	Master of Science in Computer Science and Electronics, IrNITU, specialty: System Engineer.
May-Jul., 2014	Advanced Training in «Lecturer of University» Institute of Continuing Education, ISU Nizhn'aya Naberezhnaya str. 4, Irkutsk, Russia, 664003

Personal Skills

Software Development	Assembler (Intel, AVR, STM32, ARM, PDP11), structural, object-
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Technologies oriented, aspect-oriented, generative programming, logic, logic object-oriented, functional, model-driven, data-driven, component architectures, domain specific language, language wrapping, web-programming, etc.

Programming Algol-60, Fortran-77, Object Pascal, C, C++, C#, Java, Vala, JavaScript, Python, Prolog, Logtalk, Lisp (AutoLisp), Scheme, OcaML, Julia, Rust, D, etc.

Methods Computer algebra, numerical simulation in vector-function defined as systems of differential equations, mathematical model identification (structural, parametric), computer simulation and forecasting for natural phenomena, information controlled systems, first-order automatic theorem proving, intelligent information systems (including geoinformation), model-driven architecture on the base of logic inference, linked open data, resource description framework, pattern-directed programming, decision support [informational] systems on the base of mathematical modeling encapsulation, domain specific language interpretation as a compiled code, information system component synthesis.

Languages

Mother tongue

Russian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B1	C2	B1	B2	B1
A2	A2	A2	A2	A2
A1	A2	A1	A1	A1

English

German

Serbian

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference for Language

Communication skills

- team work: I prefer executive management in software development projects and other organizational activities (e.g., conference, education) and personal research and development.

- mediating skills: I work on the borders between young people, youth trainers and senior researchers & management, for example, I participate in organizing young scientific schools, students' and international conferences, local exhibitions, student projects, etc.

Organisational / managerial skills

- activities: I prefer executive management, I like to automate inferiors' work.

- there are two PhD defended under my scientific supervision:

1. A.K.Popova, «An Information Decision Support System for Forest Resources Rational Consumption», 2008, Institute of Computational Technologies SB RAS, Novosibirsk.
2. V.V.Paramonov, «Information System «Population Cancer Register»», 2011, Institute of Computational Technologies SB RAS, Novosibirsk.

- each year I supervise in average about fifteen bachelors and four magistry dissertations in ISU, IrNITU.

Computer Skills

New IT development

Other Skills

1-th dan in Ki-Aikido (Sin-Sin-Toizu)
Agricultural worker (fan)
Vedic Psychology (fan)
Backpacking and hiking (fan)

Driving license

B

Additional information Publications

1. E.A.Cherkashin, A.K.Cherkashin, «An algebra for model scenario comparison», Procs. Of Int. Conf «INTERCARTO 2: GIS for environment investigation and cartography. Irkutsk, 1996, p. 199-200 (In Russian)
2. E.Cherkashin, S.Vassilyev, «Intelligent Control of Moving Objects», In: Mini-Micro Systems, Numerical Simulation and its Software, Vol. 19, 1998, p. 4-24 **(WoS)**
3. E.Cherkashin, S.Vassilyev, A.Postoyenko, A.Zherlov «New Logics for Intelligent Control» In: Proc. of International Conference of Florida Artificial Intelligence Research Society, 1999, pp.257-261 **(WoS)**
4. E.Cherkashin, S.Vassilyev, «Intelligent Control of Telescope», Siberian J. of Industrial Mathematics, Novosibirsk, IM SB RAS, N2, 1998, pp. 81-98 (In Russian) **(WoS)**
5. E.Cherkashin, I.Bychkov, A.Cherkashin, I.Vladimirov, «Prognosis Cartography on Base of Mathematical Modeling of Forest Resource Dynamics» The Proc. Of The 9th. Conference with International Participation Infosystems for Agriculture and Forestry. Praha. Czech Republic.
<http://www.ccss.cz/sec/sec2003/anotace/c-cherkashyn.rtf>. **(WoS)**
6. E.Cherkashin, V.Paramonov, «An Intelligent Programming System for Information System Generation» Proc. of MIPRO 2005, XXVIII International Convention, May 30-June 03, 2005, Opatija, Croatia. P. 140-143. **(WoS)**
7. E.Cherkashin, I.Bychkov, A.Kitov, «Computational Infrastructure for Parallel Processing Spatially Distributed Data», In Notes on Numerical Fluid Mechanics and Multidisciplinary Design. Computational Science and High Performance Computing II. E.Krause, Yu. Shokin, M.Resh, N.Shokina eds., Springer publ. Vol. 91, 2006. pp. 233-241 **(WoS)**
8. E.Cherkashin, A.Davydov, A.Larionov, «On the Calculus of Positively Constructed Formulas for Automated Theorem Proving», Automatic Control and Computer Sciences (AC&CS). Vol. 45, No. 7, 2011, pp. 402-407. ISSN 0146-4116 **(WoS)**
9. E.Cherkashin, V.Paramonov, et al «Model Driven Architecture is a Complex System», E-Society Journal, Research and Applications, 2011. –University of Novi Sad, Technical Faculty “Mihajlo Pupin” Zrenjanin, Serbia, V. 2, N. 2, November, 2011, pp. 15-23. ISSN 2217-3269.
10. E.Cherkashin, V.Paramonov, et al «Information Modeling of Business Processes in X-ray

- Fluorescent Analysis», MIPRO 2011. 34-th international convention on information and communication technology, electronics and microelectronics. Vol. III. May 23-27, 2011. Croatia, Opatija. //MIPRO: Croatia. – 2011., p.p. 334-337. **(WoS)**
11. E.Cherkashin, V.Paramonov, et al
«New Transformation Approach for Model Driven Architecture», Procs. of 35-th international convention on information and communication technology, electronics and microelectronics. May 23-27, 2011, MIPRO, Croatia, 2012. – C. 1082-1087. **(WoS)**
12. E.Cherkashin, D.Annenkov
“Generation technique for Django MVC web framework using the stratego transformation language”, Proc. of 36th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2013 - Proceedings, 2013, 1084-1087. **(WoS)**
13. E.Cherkashin, S.Badmatsyrenova, et al
“An optimal control module of sustainable natural resources consumption control synthesis for decision support systems”, Proc. of 37th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2014 - Proceedings, 2014, pp. 1100-1105. **(WoS)**
14. Paramonov, V., Shigarov, A., Ruzhnikov, G., Cherkashin, E.
Phonetic string matching for languages with cyrillic alphabet, Advances in Intelligent Systems and Computing, 852, Springer Verlag, 2019, pp. 301-311. DOI: 10.1007/978-3-319-99981-4_28 **(WoS)**
15. Cherkashin, E., Kazi, L., Shigarov, A., Paramonov, V.
“A computational independent model for a medical quality management information system”, CEUR Workshop Proceedings, 2221, CEUR-WS, 2018, pp. 83-89. **(WoS)**
16. Cherkashin, E., Kopaygorodsky, A., Kazi, L., Shigarov, A., Paramonov, V.
“Model Driven Architecture Implementation Using Linked Data”, Communications in Computer and Information Science, 920, 2018, Springer Verlag, pp. 412-423. DOI: 10.1007/978-3-319-99972-2_34 **(WoS)**
17. Shigarov, A., Altaev, A., Mikhailov, A., Paramonov, V., Cherkashin, E.
“TabbyPDF: Web-Based System for PDF Table Extraction”, Communications in Computer and Information Science, 920, Springer Verlag, 2018, pp. 257-269. DOI: 10.1007/978-3-319-99972-2_20 **(WoS)**
18. Cherkashin E., Shigarov A., Malkov F., Morozov A.
“An Instrumental Environment for Metagenomic Analysis”. In: Bychkov I., Voronin V. (eds) Information Technologies in the Research of Biodiversity. Springer Proceedings in Earth and Environmental Sciences. Springer, Cham, 2019, pp 151-158. DOI:10.1007/978-3-030-11720-7_20 **(WoS)**
19. Popova A.K., Cherkasin E.A., Vladimirov I.N.
“Forest Resources of the Baikal Region: Vegetation Dynamics Under Anthropogenic Use”. In: Bychkov I., Voronin V. (eds) Information Technologies in the Research of Biodiversity. Springer Proceedings in Earth and Environmental Sciences.

- Springer, Cham, 2019, pp. 96-106 **(WoS)**
20. Cherkashin E., Shigarov A., Paramonov V., Mikhailov A. "Digital Archives Supporting Document Content Inference", Proc. 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO). 2019. pp. 1037-1042. **(WoS)**
21. Paramonov V., Shigarov A., Ruzhnikov G., Cherkashin E. "Phonetic String Matching for Languages with Cyrillic Alphabet", Advances in Intelligent Systems and Computing: Proc. of 39th Intern. Conf. on Information Systems Architecture and Technology (ISAT 2018). 2019. Vol. 852. pp. 301-311. DOI: 10.1007/978-3-319-99981-4_28. URL: https://link.springer.com/chapter/10.1007/978-3-319-99981-4_28. **(WoS)**
22. Shigarov A., Cherepanov I., Cherkashin E., Dorodnykh N., Khristyuk V., Mikhailov A., Paramonov V., Rozhkov E., Yurin A. "Towards End-to-End Transformation of Arbitrary Tables from Untagged Portable Documents (PDF) to Linked Data", 2019. Vol. 2463 **(Scopus)**
23. Cherkashin, E., Shigarov, O., Paramonov, V., Representation of MDA Transformation with Logical Objects, Procs. of 2019 International Multi-Conference on Engineering, Computer and Information Sciences (SIBIRCON), Novosibirsk, Russia, 2019, pp. 0913-0918, DOI: 10.1109/SIBIRCON48586.2019.8958008. **(WoS)**
24. Cherkashin, E., Shigarov, O., Khristyuk, V. Information Infrastructure for Supporting Baikal Microbiome Research, Procs of VII International workshop "Critical Infrastructures in Digital World", 10-15 Mart 2020, Irkutsk, Russia, 2020 **(to appear) (WoS)**

Major project participation

Russian foundation for basic research

- 99-05-64075-a, system of geographical knowledge as a basis of ecologo-geographical expertise, 1999-2001, **performer**
- 01-07-90411-v, Development of Intelligent Corporative GIS "Angara", 2001-2003, **performer**
- 02-05-65054-a, The geosystems theory: basic concepts and laws, 2002-2004, **performer**
- 04-07-90227-v, Intelligent software for analytical investigations in X-ray fluorescence analysis, 2004-2006, **supervisor**
- 05-07-97201-r_Baikal_v, Intelligent Program System for Ecological Monitoring of Lake Baikal Region, 2005-2007, **performer**
- 05-07-97204-r_Baikal_v, Methods and software for support of distributed high-performance computational and information resources in research of lake Baikal, 2005-2007, **performer**
- 07-05-01061-a, Technogenic litosystems as a component of geological environment, 2007-2009, **performer**
- 08-07-00163-a, Technologies of intelligent data analysis and high-capacity information-computing resources for maintaining interdisciplinary research in geoecology and natural resource management, 2008-2010, **performer**
- 08-07-05021-b, The development of material and technical resources to carry out researches in the field of knowledge with the purpose to organize a data storage system, 2008-2008, **performer**

08-07-98005-r_Siberia_a, Program technologies for logic-mathematic modeling of Baikal region forest resources dynamics, 2008 - 2010, **supervisor**

09-07-05002-b, The development of material and technical resources to carry out researches in the field of knowledge 07 for better efficiency of interdisciplinary research by means of optimization and unification of data storage structure and control accumulating information resources by modernizing data storage system, 2009 -2009, **performer**

09-07-12017-ofi-m, Declarative specifications of information structures of files and databases; algorithms of their application to information exchange and integration of diverse interdisciplinary data,2009 -2010, **performer**

10-07-00051-a, Information technologies and software for a complex approach to the determination of the elemental material content by X-ray fluorescence, 2010 -2012, **supervisor**

14-07-00166-a, Technology for integration of distributed web-services and data within an interdisciplinary information and analysis environment, 2014-2016, **performer**

18-07-00758-a, Methods, technologies and instrumental tools of software creation for problem-oriented information systems based on constructive specifications, 2018-2020, **performer**